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EXAMINER	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 1203

Application Number: 09/224,980
Filing Date: January 04, 1999
Appellant(s): WALDROP ET AL.

Brenda D. Wentz
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed September 26, 2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 15 – 21 stand or fall together as set forth in the appellant's brief. See 37 CFR 1.192(c)(7).

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

4,469,739	Gretzinger et al.	9-1984
6,035,901	Stumpf et al.	5-2000

(10) Grounds of Rejection

The following grounds of rejection are applicable to the appealed claims:

I. Claims 15 – 21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 3 and 6 – 8 of U.S. Patent No. 5,856,249 for the reasons of record.

Claims 15 – 21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 5,855,991 in view of Gretzinger et al. (4,469,739) for the reasons of record.

While these rejections are rejections of record, the Applicant is not appealing these rejections. Instead, the Applicant has indicated that a Terminal Disclaimer will be filed to overcome the double patenting rejections once the prior art rejections are overcome.

II. Claims 15 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gretzinger et al. in view of Stumpf et al.

Gretzinger et al. discloses a woven fabric comprising an elastomeric sheath/core monofilament, corresponding to the Applicant's first yarns, running in one direction and a set of yarns, corresponding to the Applicant's second yarns, running in a perpendicular direction (abstract). Gretzinger et al. discloses that it is customary to add UV stabilizers to the elastomeric filaments (column 8, lines 40 – 44). Also, the elastomeric monofilament comprises a sheath which has a melting temperature at least 20°C lower than the melting temperature of the core (column 8, lines 64 – 66). The yarns running in a perpendicular direction are made from non-elastomeric natural or synthetic yarn such as polyethylene terephthalate (column 9, lines 6 – 20). However, Gretzinger et al. teaches that minor amounts of elastomer can be added to the yarns running in the perpendicular direction (column 11, lines 1 – 5). Gretzinger et al. fails to teach using a textured yarn mixed with elastomeric filaments as the yarn running perpendicular to the elastomeric monofilaments.

Stumpf et al. is drawn to woven seating support fabrics. Stumpf et al. discloses a woven fabric comprising elastomeric monofilaments, which correspond to the Applicant's first yarn, running in one direction and yarns, which correspond to the Applicant's second yarn, comprising polyester and elastic filaments running in the perpendicular direction, as shown in Figures 36 - 38 (column 17, lines 5 – 10). The yarns are made multi-filaments which are either spun, textured, or twisted yarns and mixed with elastic filaments (column 18, lines 63 – 66). Stumpf et al. teaches that the these mixed yarns provide a smooth seating surface and a relatively large surface area which distributes the forces acting on the user and allow aeration (column 19, lines 13 – 30). Further, textured yarns are known in the art to produce yarns with increased bulk, which in turn increases the softness of the yarns and makes the woven support more comfortable and have a better hand. Therefore, it would have been obvious for one having ordinary skill in the art to substitute the textured yarns comprising polyester and elastomeric filaments taught by Stumpf et al. for the yarns running perpendicular to the elastomeric monofilaments taught by Gretzinger et al., since Gretzinger et al. discloses these yarns can include elastomeric material and the textured yarn would improve the hand and softness of the woven support fabric making it more comfortable to sit on.

Further, since Gretzinger et al. discloses that it is customary to stabilize elastomeric filaments with UV stabilizers, it would have been obvious for one having ordinary skill in the art to stabilize the all the elastomeric filaments in the woven fabric including the elastomeric material dispersed in the perpendicular yarns to improve the elastomeric filaments resistance to UV light, and in turn increase the life of the fabric. Therefore, claims 15 and 16 are rejected.

Finally, Gretzinger et al. does not teach the density or denier of the warp and fill yarns. However, Gretzinger et al. disclose that the density and denier of the fill and warp yarns can be

varied (column 10, lines 63 – 68). Therefore, it would have been obvious to one having ordinary skill in the art to choose the claimed density (i.e. picks/inch and ends/inch) and deniers, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215. One of ordinary skill in the art would be motivated to optimize the density of the yarns and the denier of the yarns to control the breathability, texture, hand, weight, and strength of the fabric. Therefore, claims 18 – 21 are rejected.

Gretzinger et al. fails to teach using a fabric woven into a barathea weave. However, it would have been obvious for one having ordinary skill in the art to choose a known weave pattern based on its suitability for the intended use. One of ordinary skill in the art would be motivated to choose the barathea weave pattern since it will be provide improved comfort and hand. In this case, the barathea weave has an increased number of floats in the fill direction so that the multi-filament yarn running perpendicular to the elastomeric monofilament would cover the majority of the fabric's surface producing a fabric which is softer to the touch and is more comfortable to the user since the multi-filament yarn is more aesthetically pleasing than the elastomeric monofilament. Therefore, claim 17 is rejected.

III. Claims 15 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stumpf et al. in view of Gretzinger et al.

The features of Stumpf et al. and Gretzinger et al. have been set forth above. Stumpf et al. disclose a woven fabric with an elastomeric monofilament, corresponding to the Applicant's first set of yarns, in a first direction and a spun or textured yarn, corresponding to the Applicant's second set of yarns, in a second perpendicular direction. The spun or textured yarns **374** can

include elastic components incorporated into each strand **376** (column 18, line 66 – column 19, line 2).

Stumpf et al. discloses that the elastomeric monofilament can have a denier of 2350 (column 17, lines 22 – 23) and have a density of about 24 – 26 monofilaments per inch (column 18, line 59). Additionally, Stumpf et al. discloses the density of the yarns is about 7 – 10 yarns per inch (column 19, lines 17 – 18).

Stump et al. fails to teach that the elastomeric yarns are sheath/core bicomponent yarns and that the elastomeric yarns are UV stabilized. The features of Gretzinger et al. have been set forth above. Gretzinger et al. is drawn to woven seat support fabric. Gretzinger et al. discloses using a sheath/core bicomponent yarn as the elastomeric monofilament in the woven seat support. The sheath component is heat set to stabilize the weave by bonding the monofilaments to the yarns running perpendicular. Further, the sheath component has a melting point of at least 20°C below the melting point of the core. Additionally, Gretzinger et al. discloses it is customary to add UV stabilizers to the elastomeric filaments. Therefore, it would have been obvious for one having ordinary skill in the art to substitute the sheath/core bicomponent yarn taught by Gretzinger et al. for the elastomeric components in the woven seat support taught by Stumpf et al. so that the fabric can be bonded at the crossovers to increase the stability of the fabric and make it less likely to unravel. Additionally, it would have been obvious to one having ordinary skill in the art to add UV stabilizers, as taught by Gretzinger et al., to all the elastomeric filaments taught by Stumpf et al. to increase the life of the elastomeric material in the seat support by improving the elastomeric filaments resistance to UV light. Thus, claims 15 and 16 are rejected.

Further, it would have been obvious to one having ordinary skill in the art to choose the claimed density (i.e. picks/inch and ends/inch) and deniers, since it has been held to be within the general skill of a worker in the art to discovering an optimum value of a result effective variable (i.e., density and denier) as set forth above. Therefore, claims 18 – 21 is rejected.

Finally, Stumpf et al. fails to teach using a fabric woven into a barathea weave. However, it would have been obvious for one having ordinary skill in the art to choose the barathea weave pattern based on its suitability for the intended use. In this case, one of ordinary skill in the art would be motivated to choose the barathea weave pattern since it will be comfortable to the user by placing the softer yarns (i.e., the multi-filament textured yarns) on the surface of the fabric while providing equally distributed support to the user as taught by Stumpf et al. (column 19, lines 19 – 38). Therefore, claim 17 is rejected.

(11) Response to Argument

I. The Applicant argues, for the first time during prosecution, that the rejections based on Gretzinger et al. in view of Stumpf et al. and Stumpf et al. in view of Gretzinger et al. are improper because Stumpf et al. is a non-analogous reference since Stumpf et al. is not within the field of the inventor's endeavor (Appeal Brief, pages 5 – 8). Specifically, the Applicant states that the purpose of the prior art and the present invention are different since "Stumpf et al. stated objectives are (a) to minimize shear forces acting on … the user … and (b) to position the body of the user in ergonomically desirable postures" while the Applicant's objective is minimizing the UV degradation of fabric. Further, the Applicant argues that Stumpf et al. and the present invention are not in the same field of endeavor because "Stumpf et al. is [not] within the field of Appellant's invention (automotive upholstery fabric)."

First, it is noted that the Examiner agrees that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

With regards to the Applicant's statement that Stumpf et al. is not reasonably pertinent to the Applicant's purpose or objective, the Applicant's own specification states "it is a general object of the present invention to provide a textile structure incorporating yarns of elastomeric character" (page 3, 1st paragraph). While the Applicant's more specific purposes deal with improving the UV resistance of elastomeric yarns in a textile structure, the Applicant's admits that the more general purpose of the invention is creating a textile fabric which includes elastomeric yarns. While the Examiner agrees that the purpose of Stumpf et al. is not specifically drawn to a UV resistant elastomer textile, Stumpf et al. is relevant to the Applicant's general purpose, since Stumpf et al. discloses "a textile structure incorporating yarns of elastomeric character". Hence, Stumpf et al. does have a similar purpose to the Applicant's and qualifies as analogous art.

With regards to the Applicant's arguments that Stumpf et al. is not within the Applicant's field of endeavor, the Applicant's claims are drawn to a ***textile*** material. And as set forth above, the Applicant's own specification discloses that the general purpose of the invention is an elastomeric textile material. Therefore, since Stumpf et al. is drawn to "a textile structure incorporating yarns of elastomeric character," then Stumpf et al. is within the Applicant's field of endeavor. In fact, the ***textile*** in both the Applicant's invention and Stumpf et al. comprise elastomeric monofilaments running in a first direction, interwoven with textured yarns comprising a blend of polyester and elastomeric filaments running in a second direction

perpendicular to the first direction. Thus, Stumpf et al. is within the Applicant's field of endeavor, i.e., a ***textile*** material, and is therefore, considered to be analogous art.

Finally, even if the Applicant's field of endeavor was limited to upholstery seating material as is argued by the Applicant, Stumpf et al. is still within the Applicant's field of endeavor. First, Stumpf et al. is specifically drawn to elastomeric upholstery fabric used as the support material for seating structures such as chairs, and automotive seats are just specific types of chairs. Second, the Applicant tries to imply the Stumpf et al. invention is not analogous by calling the Applicant's own invention ***an automotive upholstery fabric*** (Appeal Brief, page 5) and stating that "[t]he ***woven furniture support material*** of Gretzinger et al. and the ***woven chair support material*** of Stumpf et al. would not yield the elastomeric, UV resistant ***automotive upholstery fabric*** of Appellant's invention" (emphasis added) (Appeal Brief, page 8, 3rd paragraph). It is established that the ***woven furniture support material*** taught by Gretzinger et al. is within the Applicant's field of endeavor, since the Applicant directly refers to Gretzinger et al. in the background section of the application. However, the Applicant asserts that Stumpf et al. is not within Applicant's field of endeavor, because it is drawn to a ***woven chair support material*** and not a ***woven furniture support material***. Isn't a ***chair*** a specific type of ***furniture***, and, thus Stumpf et al. would qualify as a ***woven furniture support material***? And isn't the ***automotive upholstery fabric*** in the Applicant's invention being used on ***automotive seats***? And aren't ***automotive seats*** just specific types of ***chairs***? Therefore, the Applicant's own invention is ***upholstery fabric*** used as a ***woven chair support material*** in automotive structures. Hence, the fabric in Stumpf et al. has the same purpose as the Applicant's fabric, a ***woven chair support material***. For these reasons, Stumpf et al. is considered to be analogous art and the rejection is maintained.

II. Finally, the Applicant states that the combination of Gretzinger et al. and Stumpf et al. would not yield the elastomeric UV resistant fabric claimed by the Applicant (Appeal Brief, page 8). It is the Examiner's contention that the rejections based on the combination of Gretzinger et al. in view of Stumpf et al and the combination of Stumpf et al. in view of Gretzinger et al. do address all the claimed limitations. However, since the claims stand or fall together, for simplicity, only the individual limitations set forth in claim 15 will be addressed in response to this argument.

As set forth above, both prior art references clearly teach a woven fabric with elastomeric monofilament yarns running in a first direction and Stumpf et al. teaches that yarns comprising polyester filaments and an elastomeric filament are running in a second direction, while Gretzinger et al. teaches that the multi-filaments yarns running in a second direction can be modified to include a minor amount of elastomeric material. Thus, Gretzinger et al. provides motivation to use yarns comprising polyester filaments and an elastomeric filament, such as the yarns taught by Stumpf et al.

Additionally, even though Stumpf et al. is silent on the issue of UV stabilizers, Gretzinger et al. discloses that UV stabilizing additives can be added to the elastomeric filaments. While Gretzinger et al. might be specifically discussing the sheath/core elastomeric monofilament when this statement is made, this still suggests to one of ordinary skill in the art that UV stabilizers are regularly added to elastomeric filaments in general. Thus, one of ordinary skill in the art would be motivated to use UV stabilizers in all the elastomeric filaments in the woven fabrics taught by Gretzinger et al. or Stumpf et al. since it is known in the art to add UV stabilizers to elastomeric filaments to improve the fibers resistance to UV light, which in turn increases the life of the material. Otherwise the elastomeric filaments would become brittle and

crack or break. Therefore, it is felt that all the features are taught by the references and sufficient motivation is found within the references to produce a textile comprising the limitations found in claim 15. Therefore, the rejections are maintained.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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